4

Stakeholder and Public Engagement

4.1 Stakeholder and Public Engagement Plan

A comprehensive stakeholder and public engagement plan was undertaken that had several components including establishing a Technical Advisory Committee (TAC), developing a project website, conducting stakeholder interviews, convening public meetings, and conducting transit access surveys. This Chapter describes the outreach tools and materials that were developed for this project, and public and stakeholder feedback received.

4.2 Technical Advisory Committee

A Technical Advisory Committee (TAC) was established consisting of active stakeholders, including Morris County Division of Transportation (MCDOT), Morris County Division of Engineering, North Jersey Transportation Planning Authority (NJTPA), NJ TRANSITTRANSIT, New Jersey Department of Transportation (NJDOT), TransOptions, and study area and surrounding municipality representatives from Chatham Borough, Chatham Township, Florham Park Borough, Harding Township, Madison Borough, and Morris Township. The purpose of the TAC was to provide project input on draft products to facilitate data exchange, and to provide guidance in the selection of stakeholder interview candidates, the transit access survey, and other technical matters.

Three working TAC meetings were conducted. The first TAC meeting was conducted on February 8, 2012. The meeting included an overview of the project including project purpose, objectives, schedule, and scope. Data needs,

the public open house meeting, parking survey, transit access survey, and stakeholder interviews were also discussed.

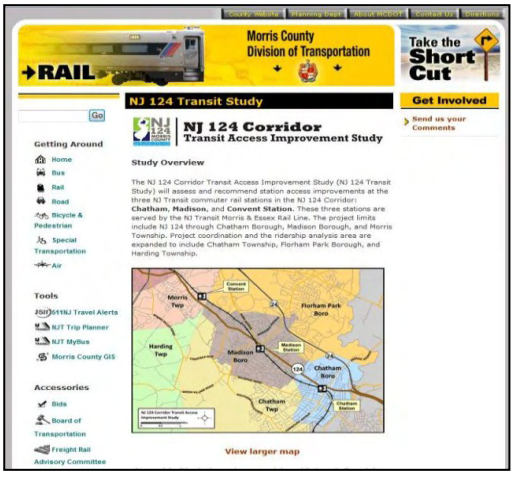
The second TAC meeting was conducted on November 28, 2012. The meeting focused on what has been learned to date through the stakeholder interviews, the public open house, transit access surveys, existing data review, land use and zoning analysis, and other existing conditions analyses. Data needs and potential solutions to be studied were also discussed.

The final TAC meeting was conducted on March 27, 2013. At the final meeting an update was provided on the project progress in terms of scope and deliverables along with a detailed presentation of the project's recommendations.

4.3 Project Website

VHB worked with the MCDOT, the Morris County web manager, and web designer to develop a project website. The website included a study overview and study area map, project objectives, a list of TAC members and links to their websites, a listing of project tasks along with links to the associated deliverables, and a "send us your comments link" that allowed people to sign up for project emails and provide comments or suggestions. The project website was also used to advertise both the public open house meeting and the transit access survey. Figure 4-1 shows a screenshot of the project website.

Figure 4-1: Project Website found on the MCDOT website (www.morrisdot.org/nj124)



4.4 Stakeholder Interviews

VHB, along with Morris County and the Technical Advisory Committee (TAC), identified seven stakeholder groups that were interviewed in late March and early April 2012. Most of the meetings were held at the Madison Public Library (Figure 4-2). As shown in Table 4-1, 40 attendees representing 30 different organizations participated in the stakeholder meetings. Two additional stakeholders provided email responses to the interview questions due to their inability to attend the stakeholder meetings.

Table 4-1 Stakeholder Interviews

	Stakeholder Group	Organizations	Attendees	Email Responses
1	Transit Provider: NJ TRANSIT and TransOptions (separate meetings)	2	10	
2	Municipal Planning Representatives	4	4	
3	Municipal Chambers of Commerce/Economic Development	4	4	
4	Public Works and Parking Enforcement Representatives	5	5	
5	Senior Citizen and Advocacy Groups	8	10	
6	Other	2	2	2
7	Businesses and Colleges	5	5	
Total		**30**	**40**	**2**

The following sections provide a summary of stakeholder feedback divided into four categories: transit, parking, pedestrians/ bicycles/ kiss-n-ride, and land use and economic development. Detailed meeting notes can be found in Appendix B.

4.4.1 Transit

NJ TRANSIT bus routes 873, 878, 879 and the MAD Shuttle route primarily serve the NJ 124 corridor as last mile distributors, providing service from the stations to train riders' final destinations. Each of the NJ TRANSIT routes (873, 878, and 879) is served by a single bus so providing more frequent or a longer span of service would be costly. NJ TRANSIT has received an increase in bus

stop requests from the study area as the economy rebounds and businesses move to the corridor. Some of the privately funded and operated shuttles are difficult to sustain due to funding issues. It is perceived that transit cost and schedules, among other reasons, deter student transit ridership in the corridor.

4.4.2 Parking

Parking at the train stations is not as constrained as it was in the pre-recession years. Parking management may be a key strategy for improving access especially for nonresidents. The daily parking spaces are filled early in the morning at Chatham and Madison Stations. There are a few enforcement and safety issues related to parking, including illegal parking in handicapped spaces, and illegal parking or standing by drivers waiting to pick-up or drop-off their passengers. Due to the lack of parking at the train stations, commuters are finding alternative parking at local churches, or traveling to other stations to park and board transit, such as at Summit and Jersey City.

Figure 4-2: Stakeholder interviews held at the Madison Public Library

4.4.3 Pedestrians, Bicycles, and Kiss-n-Ride

Many people walk or bicycle to access Chatham and Madison Stations. There have been some bicycle thefts reported at Madison Station. More bicycle lockers and racks are needed to meet bicycle parking demand at Chatham and Madison Stations. Bicyclists and pedestrians would like to see the Traction Line Recreation Trail (a paved bicycle and pedestrian path along the NJ TRANSIT Morris & Essex: Morristown Rail line from Morristown to the border of Madison) extended into Madison. Pedestrians are concerned about train station lighting, especially under the rail bridges. Additional trailblazing and information signage are needed at the stations. Kiss-n-ride (drop-off) areas, as well as staging areas for taxis and shuttles, are needed to more efficiently manage parking.

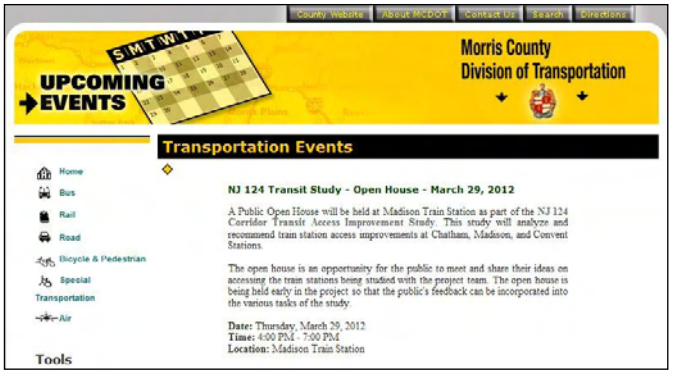
4.4.4 Land Use and Economic Development

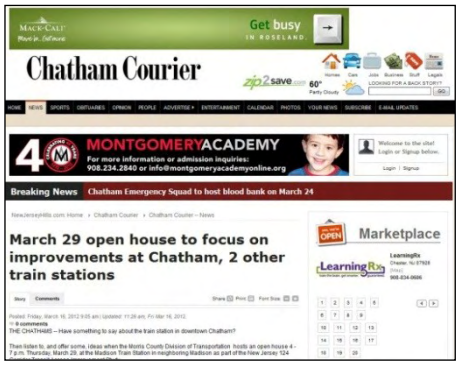
The commercial rental space in downtown Madison and Chatham Boroughs seem consistently occupied, but there are many vacancies in office parks within the study area such as in Giralda Farms and at various locations along Park Avenue. Municipalities are mixed on their desire to see denser Transit-Oriented Development (TOD). In some cases there is conflicting levels of interest for denser development from different organizations within the same town. Chatham Borough and Madison are striving to maintain the character of their town centers, but also recognize the benefit of new development. Some infill development locations can be identified. Convent Station appears to be the best opportunity for TOD, which will increase transit usage but will not offset existing access issues.

4.5 Public Open House Meeting

A Public Open House meeting was held Thursday, March 29, 2012 from 4PM to 7PM at the Madison Train Station. Meeting notices were posted on the project website, several of the municipal websites, and websites of TAC members (Figure 4-3). Notices were posted on social media sites like Facebook and Twitter. Flyers were posted at Chatham, Madison, and Convent Train Stations, as well as other public places, including libraries and grocery stores (Figure 4-4). A press release was distributed by Morris County and local newspapers had articles alerting the public to the open house meeting.

Figure 4-3: Public Open House meeting notes posted on various websites and social media sites





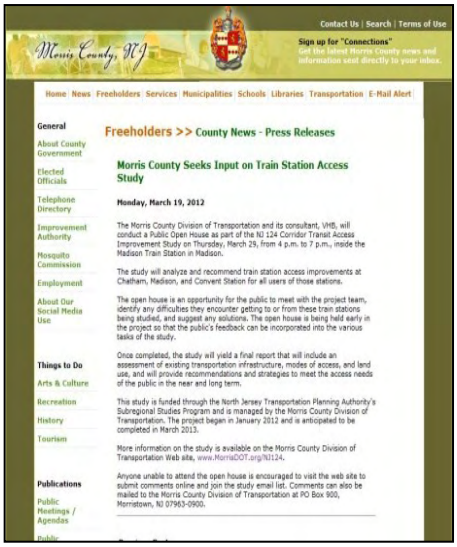


Figure 4-4: Public Open House flyer with QR code that was posted at each of the train stations, in municipal buildings, and other public places

The open house included five "information areas" where attendees viewed presentation boards with project staff on-hand to answer questions (Figure 4-5). These information areas provided an introduction to the project and an opportunity to learn about station access issues as follows:

- Introduction/ PowerPoint – Project staff provided a PowerPoint presentation with several slides outlining the purpose, goals, and objectives of the study, followed by a few interactive survey slides to record where participants live, work, primary mode of transportation, and their top transportation concerns within the corridor. The final two slides included information regarding upcoming study surveys and a guide to the "information areas" at the public meeting. Participants were also given a small card with the project website address.
- Transit Access – Presentation boards displayed the transit routes serving the study area.
- Traffic Access and Parking – Presentation boards provided the location of train station parking areas and the transportation network.
- Bicycle and Pedestrian Access – One presentation board provided a list of potential issues such as conflicts with turning vehicles or missing sidewalks in order to facilitate discussion about the problem areas related to bicycling and walking in the study area. A second presentation board described amenities to improve pedestrian and bicycle safety and circulation.
- Land Use – Presentation boards identified the benefits and trends of TOD, and displayed maps of each station area with photos showing building types in the area.

Figure 4-5: Public Open House meeting held at the Madison Train Station

Notes from the Transit Access, Traffic Access and Parking, Bicycle and Pedestrian Access, and Land Use "information areas" can be found in Appendix B.

About 30 people attended the Madison Train Station Open House and 23 people participated in the interactive survey polling activity. The highest number of survey participants were from Madison Borough (10 people) and Harding Township (6 people), and some worked in New York City (7 people) or Madison Borough (5 people).

Most survey respondents travel to the train station by driving and then parking (44 percent) as shown in Figure 4-6. When asked to identify the top three transit access improvements needed in the NJ 124 corridor, 27 percent of the respondents wanted more parking, 21 percent wanted shuttles/ bus connections, and 18 percent requested improved transit information as shown in Figure 4-7.

Figure 4-6: How do you get to the station?

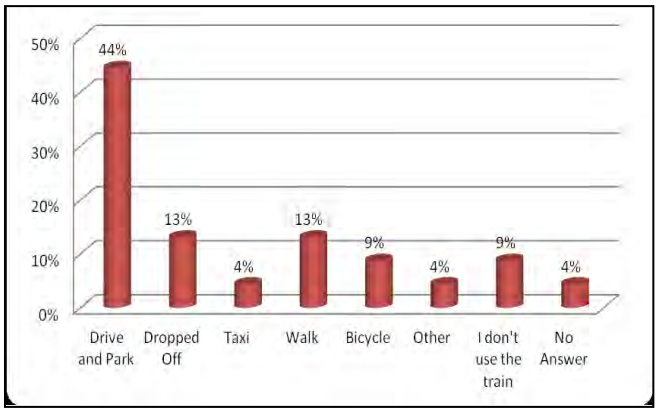
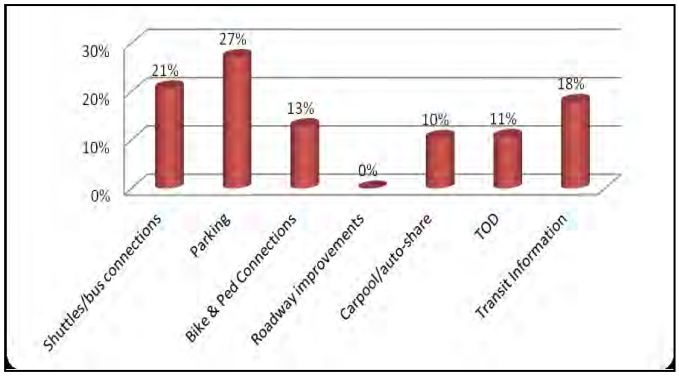


Figure 4-7: Ranking of top three transit access improvements needed



4.6 Survey Overview

Two public surveys were conducted to gather information pertaining to study area station access: a web-based survey was conducted in May 2012 and an augmentation of NJ TRANSIT's ScoreCard Customer Satisfaction survey was conducted in June 2012.

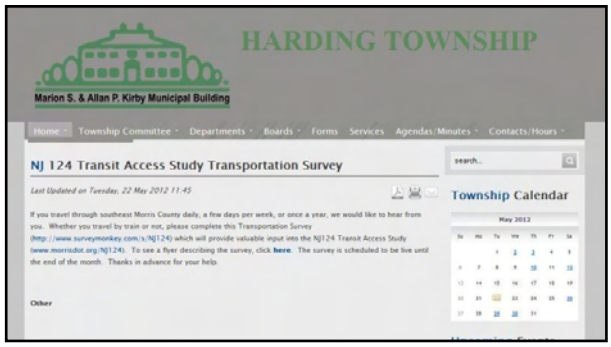
4.6.1 Survey Methodologies

The in-depth online survey was launched in May 2012 through use of the Survey Monkey web service. The survey was targeted to current NJ TRANSIT rail customers (both regular commuters and occasional rail riders) as well as people who are not currently rail customers but may travel to or from the study area. A hyperlink to the online survey was posted on the project webpage and MorrisDOT.org home page. A total of 29 questions were included in the survey (See Appendix B). An extensive outreach effort was conducted to encourage the public to participate. Signs with a short study description, study website address, and Quick Response (QR) Codes (a QR Code is a smart phone-scan able barcode imbedded with a website address) were displayed throughout the study area at the train stations, local grocery stores, libraries, post offices, the YMCA, and municipal buildings. TAC members and stakeholder group meeting attendees were asked to assist in the outreach effort by posting a link to the survey on their websites, or emailing the survey hyperlink to their constituents. Several of the municipalities and TAC members posted the survey link on Twitter, Facebook, and/ or their websites. Additionally, people that signed up for the project mailing list on the website and at the project open house were also invited by email to take the survey. Morris County issued a press release regarding the survey and also included information in the Morris County Connections Newsletter. These advertising strategies are shown in Figure 4-8.

Additional data was collected through NJ TRANSIT's quarterly ScoreCard survey. ScoreCard is NJ TRANSIT's online quarterly customer satisfaction survey which is designed to collect information based upon the five pillars of NJ TRANSIT's metrics-based performance system:

- Customer Experience
- Safety and Security
- Financial Performance
- Corporate Accountability
- Employee Excellence

Figure 4-8: Survey flyer for the online survey, press release, and advertising on municipal websites and other social media sites



NJ TRANSIT uses the ScoreCard results to measure overall performance, guide strategic business decisions, and help bring accountability to their riders and the taxpayers of New Jersey. The hyperlink for the survey is sent electronically to NJ TRANSIT customers and the survey is completed online.

The ScoreCard survey related to this study was conducted by NJ TRANSIT in June 2012 as part of their quarterly ScoreCard effort. The survey was available for completion between June 8, 2012 and June 29, 2012. Fifteen supplemental study-oriented questions were provided to NJ TRANSIT for inclusion in the ScoreCard survey. These questions were asked (in addition to the regular ScoreCard survey questions) to respondents who indicated that they either boarded or alighted trains at Chatham, Madison, or Convent Stations. At the three study stations, NJ TRANSIT staff distributed small business cards with ScoreCard information and website address, and spoke with customers to encourage their participation to increase response rates. Staff promoted the survey at the stations on a few days over the three week period that the survey was available for completion. These efforts exceeded NJ TRANSIT's regular ScoreCard survey notification and distribution procedures.

The next two sections of this report discuss the results of each survey.

4.7 Online Survey Findings

The online survey was open for response for approximately six weeks. A total of 468 surveys were started on the website; after further review 433 were substantially complete and included in the analysis. Surveys were eliminated from analysis if they contained invalid home or work zip codes, or had too few completed questions.

This section includes key findings and selected tables that were prepared from the survey results. The universe of potential participants in the online survey participants was largely undefined, so the survey data was not "weighted" or expanded to represent the universe. The web survey was specifically designed to capture opinions and experiences from a wide range of respondents and it was primarily advertised within Morris County. The potential that some populations would be over-represented or under-represented because the survey was not weighted (or balanced) was expected. For instance, there may be an over-representation from passengers having difficulty accessing the stations (during their travel to the station, with parking, or some other access issue) since the survey is a transit access study and the survey offered them the opportunity to lend their opinion. Regular commuters that are satisfied with access to the station may be under-represented because they may feel they

have nothing to add to the study and thus were not interested in taking the time to complete the survey.

Therefore, the results of this survey should not be taken in the context that they accurately (or statistically) represent the entire universe of potential respondents that regularly commute via the Morristown Line, occasionally use the Morristown Line, or could potentially use the Morristown Line within the study area. Rather, the results of the survey should be used to understand a sampling of experiences and opinions from that target universe of respondents to inform the definition of study area needs and potential improvements.

4.7.1 General Characteristics of Respondents

Nearly 86 percent of the survey respondents live in Morris County, three percent in Essex, 2.3 percent in Somerset, and 1.4 percent in Union County. The top hometowns included about 30 percent from Morris Township (including Morristown which shares a zip code with Morris Township), almost 28 percent from Madison, 10 percent from Chatham (Borough and Township share a zip code), and almost four percent from Florham Park (see Table 4-2). Since the data was collected by zip code, towns with shared zip codes were grouped together.

Table 4-2: In what zip code or town is your home located?
(All Respondents)

Home Town	Percent
Morris Township (Including Morristown)	30.3%
Madison	27.7%
Chatham (Borough and Township)	10.2%
Florham Park	3.7%
Morris Plains	2.1%
Harding	1.6%
Randolph	1.4%
Mendham	1.4%
All Others	21.7%
Total	**100.0%**

Most (about 80 percent) of the respondents are employed full or part-time, 11 percent are retired, seven percent are not working, and three percent are full or part-time students.

Most respondents work five days a week (nearly 70 percent). About 11 percent work four days a week, and over four percent work more than five days per week. Nearly 45 percent work or attend school in Morris County, about 16 percent work or attend school in New York, and almost three percent work or attend school in Essex County. As shown in Table 4-3, most of the respondents work in Madison (nearly 23 percent), in New York (about 16 percent) or in Morristown.

Table 4-3: In what zip code or town is your work or school located?
(All Respondents)

Work/School Town	Percent
Madison	22.5%
New York	16.4%
Retired	11.3%
Morris Township (including Morristown)	10.9%
No Answer	8.3%
Not working	6.7%
Florham Park	3.7%
Chatham (Borough and Township)	1.9%
Parsippany	1.6%
All Others	16.7%
Total	**100.0%**

A high percentage of respondents indicated they drive alone (nearly 61 percent) to work or school. Almost 23 percent indicated that they travel by train; nearly five percent participate in a carpool or vanpool, and about six percent (three percent each) walk or bicycle to work.

Results from a subset of respondents that live and work or go to school in Morris County show that most drive alone to work (72 percent), about eight percent walk, about six percent carpool or vanpool, nearly six percent bicycle, about three percent either telework or work a compressed schedule (work same number of weekly hours over fewer weekdays), and about two percent travel by train within Morris County (see Table 4-4). This indicates that the respondents within Morris County were mostly comprised of non-transit commuters or occasional users.

Table 4-4: Access Mode to Work or School
(*Respondents that Live and Work or go to School in Morris County*)

Access Mode to Work/School	Percent
Bicycle	5.5%
Bus	0.7%
Car/Vanpool	6.2%
Drive Alone	72.4%
Dropped Off by spouse or family member	1.4%
Taxi	0.7%
Telework/Compressed Schedule	2.8%
Train	2.1%
Walk	8.3%
Total	**100.0%**

4.7.2 Travel Patterns of Train Riders

The purpose of this project is to determine the most effective and acceptable course of action to improve access to train stations in southeast Morris County for all users of all ages and abilities, including transit dependent populations. While the initial questions related to home and work/ school locations and commute modes, it was important to also capture feedback from those who ride the train less frequently, not just people commuting to work and school. Of the 433 survey responses, 80 respondents indicated they travel by train to commute to work or school. All survey participants were asked about their train usage, for any purpose, and 374 (86 percent) indicated they had traveled by train in the past year. The tables and figures that follow in this section as well as Section 4.7.3: Parking Patterns of Train Riders and Section 4.7.4**:** Station Access Preference are from the 374 respondents (or some subset of 374 responses in the case of follow-up questions) which are comprised of 80 (21 percent) regular commuters and 294 (79 percent) less frequent rail travelers.

Most of the 374 respondents that traveled by train accessed it at Madison Station (nearly 37 percent), Convent Station (23 percent), Morristown Station (13 percent), or Chatham Station (nearly 12 percent), and they traveled primarily to New York Penn Station (about 83 percent) or Hoboken (five percent) as depicted in Tables 4-5 and 4-6. As shown in Figure 4-9, about 51 percent of these respondents drove alone to the train station, 23 percent walked to the train station, 12 percent were dropped off, and nearly 10 percent traveled to the station by a car or vanpool.

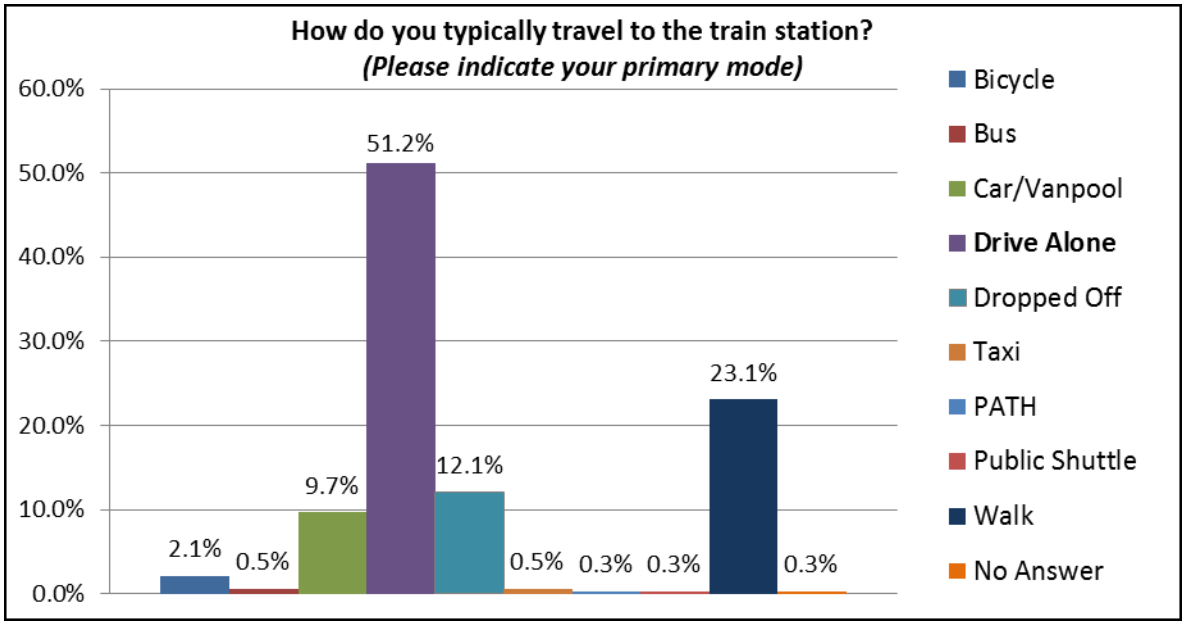
Table 4-5: When you travel by train, what is your typical boarding station?

Train Boarding Station	Percent
Madison	36.9%
Convent Station	23.0%
Morristown	13.1%
Chatham	11.8%
Morris Plains	2.7%
Summit	2.4%
Denville	1.3%
South Orange	1.1%
All others	7.5%
No Answer	0.3%
Total	**100.0%**

Table 4-6: When you travel by train, what station do you typically get off?

Alighting Station	Percent
NY Penn Station	82.9%
Hoboken	5.3%
Newark Penn Station	2.4%
Newark Broad Street	1.1%
Madison	2.7%
All Others	3.5%
No Answer	2.1%
Total	**100.0%**

Figure 4-9: Typical Mode used to Travel to the Train Station



The survey respondents who boarded trains at the three study area stations (Chatham, Madison, and Convent Station) are primarily residents of the town

where the station is located. About 75 percent of the respondents boarding at Chatham Station are from Chatham Township or Chatham Borough. About 14 percent are from Madison, nine percent from Florham Park, and about two percent are from Morris Township including Morristown.

Respondents boarding at Madison Station reside in a wider area than Chatham Station, including 77 percent from Madison, six percent from Florham Park, four percent from Harding, three percent from Morris Township including Morristown, one percent from Chatham (Borough and Township), and the remaining nine percent from towns outside the project study area.

Survey participants who boarded at Convent Station primarily live in Morris Township including Morristown (79 percent), the Green Village area of Chatham and Harding Townships (one percent each), and a variety of other towns outside the study area comprising the remaining 19 percent.

About three percent (13 respondents) reported that they exited the train at one of the three study area stations. Ten passengers exited at Madison Station, three at Convent Station, and none at Chatham Station. Four passengers traveled between study area stations – three between Chatham and Madison Station, and one between Madison and Convent Station. When asked about their egress mode to travel from Madison or Convent Station to their final destination, most responded that they walked to their final destination while one respondent traveled by bicycle.

4.7.3 Parking Patterns of Train Riders

Most respondents (about 76 percent) that drove and parked at the train station indicated that they parked in a station or municipal parking lot. About 13 percent parked for free either on-street or in a free private lot, and seven percent parked in a private lot nearby (see Figure 4-10).

As shown in Figure 4-11, most respondents reported they paid a daily parking fee (about 51 percent), while 18 percent parked for free, and almost nine percent paid for a monthly residential permit. While the percentage of daily and free parkers may seem high, it is important to note that only 21 percent of the respondents are regular train commuters while 79 percent are occasional riders who may travel by train infrequently, or during off-peak hours like nights and weekends. Since these riders only park at the station occasionally, they are more likely to use daily parking rather than purchase a monthly permit.

Figure 4-10: Parking Location

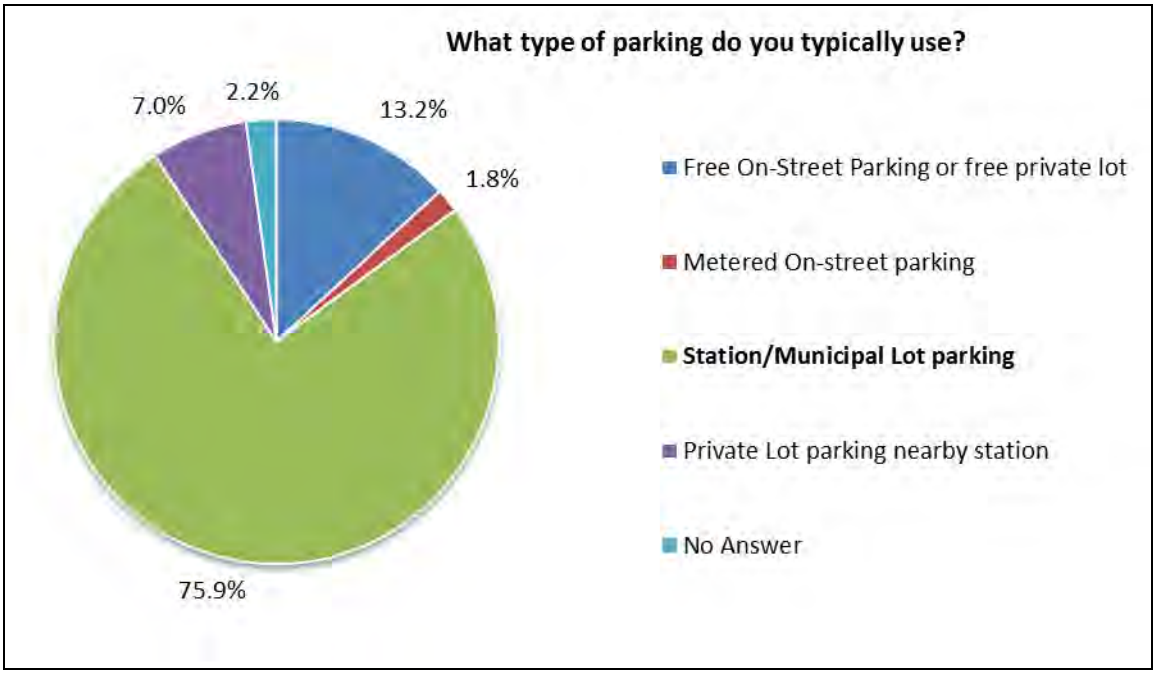
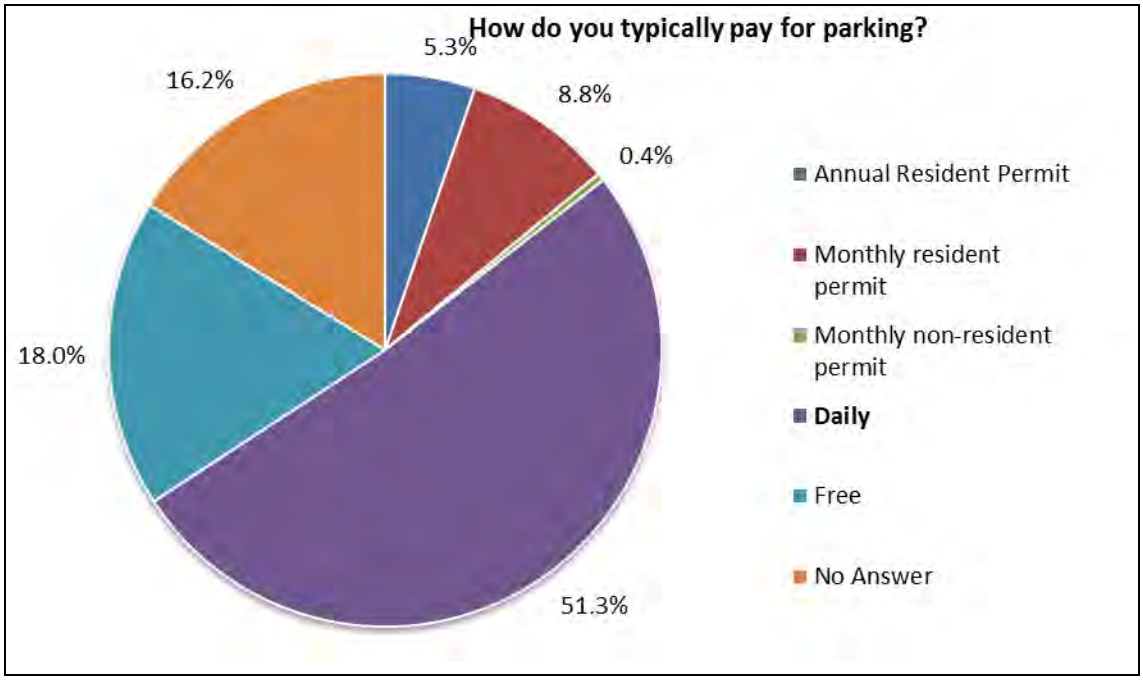


Figure 4-11: Parking Payment Type



4.7.4 Station Access Preferences

About 80 percent of train rider respondents are content with their current travel mode to the station. About 44 percent of the remaining respondents (those that are not using their preferred mode) are currently driving alone to the train, while almost 24 percent are walking, nearly 21 percent are dropped off, and the remainder is coming by carpool, bicycle or taxi (see Table 4-7). A closer look reveals that most of those dissatisfied with driving alone to a station would prefer to be able to walk to the station (11 percent), and about 10 percent would like to be dropped off at the station. Another six percent of those dissatisfied with driving alone would like to continue to drive alone and park, if their trip would be improved if there is more parking (both resident and non-resident) or free/ less expensive parking.

Overall, of the respondents not satisfied by their current access mode to the train station, almost 24 percent (or nearly five percent of the total train riders) would prefer to use a mode requiring parking (either driving alone or carpooling). Walking, a public shuttle, or getting dropped off were each identified as the preferred access mode by 18 percent of the dissatisfied respondents, and bicycling to the train station was identified by about 17 percent.

4.7.5 Vehicle Availability and Distance to Stations

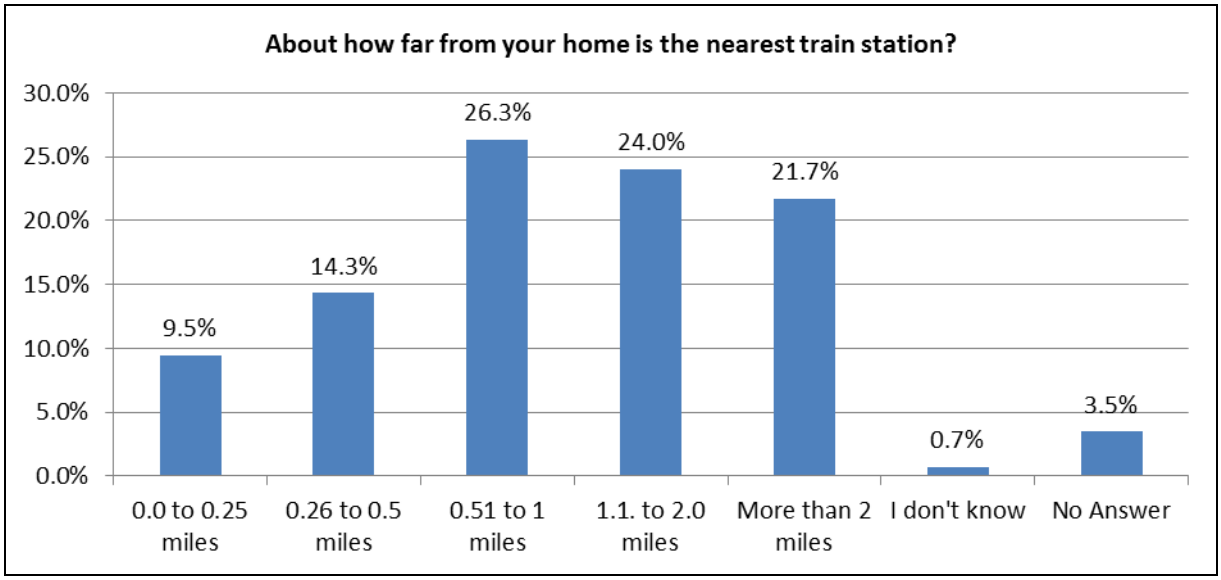
Nearly 76 percent of all respondents said they had a personal vehicle available for their trip. The actual percentage may be higher however, as this question had a high "no answer" percentage (about 18 percent). The high percentage of respondents with available vehicles is consistent with the reported high percentage of train riding respondents that either drove alone (about 51 percent) or car/ vanpooled (about ten percent) to travel to the train station.

Nearly 46 percent of the respondents reported that they live more than one mile from the nearest train station (see Figure 4-12). About 26 percent live between a half mile and one mile away, 14 percent reside between a quarter mile and half mile way, and just under 10 percent live within a quarter mile of a station. A transit stop is typically considered to be accessible by walking from locations within a quarter mile.

Table 4-7: Preferred Access Mode to Station of Train Travelers NOT Currently Using their Preferred Access Mode

Current Mode	Preferred Mode	Percent
Bicycle	Car-Drop off	1.4%
Bicycle Total		***1.4%***
Car-Dropped off	Bicycle	4.2%
	Carpool and park	1.4%
	Drive alone and park	8.3%
	Public Shuttle	2.8%
	Walk ONLY	1.4%
	Other Train Station	1.4%
	No Answer	1.4%
Car-Dropped off Total		***20.8%***
Carpooled and parked	Public Shuttle	2.8%
	Walk ONLY	5.6%
Carpooled and parked Total		***8.3%***
Drove alone and parked	Bicycle	5.6%
	Car-Drop off	9.7%
	Drive alone and park	5.6%
	Public Shuttle	9.7%
	Walk ONLY	11.1%
	Other Train Station	1.4%
	No Answer	1.4%
Drove alone and parked Total		***44.4%***
Taxi	Car-Drop off	1.4%
Taxi Total		***1.4%***
Walk Only	Bicycle	6.9%
	Car-Drop off	5.6%
	Carpool and park	2.8%
	Drive alone and park	5.6%
	Public Shuttle	2.8%
Walk Only Total		***23.6%***
TOTAL		**100.0%**

Figure 4-12: Distance from Home to Nearest Train Station



4.7.6 Access Improvement Recommendations

Two questions were asked regarding improving access to the train stations. The first question was asked to people who are currently riding the train on their regular commute to work or school. Specifically the question was, "What is needed most to improve travel to and from the NJ TRANSIT train station?" The question was designed to be open-ended where participants could write in any response. The high "no answer" percentage (nearly 33 percent), for this question, is most likely because of the open-ended nature of the question where respondents were required to type in a reply rather than select from provided multiple choices.

The second question was, "What improvements could be made to encourage you to make more trips by train?" This was asked as a multiple choice question to all survey participants (not just regular train commuters). Multiple answers were permitted and there was an "other" option where a person could type in their own response. The "other" responses were coded for analysis similar to the responses in the open-ended question.

The results of both questions are shown in Tables 4-8 and 4-9. Responses are grouped and color-coded by category to facilitate comparisons between each other. The color coding legend is shown below the tables. The top three categories are similar for both questions. The top improvements identified for both lists were in the more parking category (nearly 25 and 38 percent), followed by train service/ fares/ information/ accessibility improvements that

would need to be implemented by NJ TRANSIT (almost 12 and nearly 36 percent), bicycle and pedestrian improvements (eight and almost 22 percent), and shuttles (seven and almost 20 percent).

Table 4-8: What is needed most to improve travel to and from the NJ TRANSIT train station?

Improvement	Percent
More Parking	24.9%
Parking Management etc.	4.8%
Buses/Shuttles to Station	7.0%
Improved bicycle access, parking	4.3%
Improved walk access; sidewalks, crosswalks	4.0%
Traffic improvements	1.9%
Faster, more reliable, expanded train service	8.8%
Hi-Level Platform	0.5%
Lower or maintained train fares	2.4%
Next Train information	0.3%
Other	0.8%
Nothing; Travel is fine	7.5%
No Answer	32.9%
Total Respondents	**374**

Color Coding	
More Parking	
Parking Management	
Shuttles	
Bicycle/Pedestrian	
Traffic/Roadway	
Carpool/Auto-Share	
TOD Development	
Train Service/ Fares/Information/ Accessibility	
Other	
Nothing Needed	
No Answer	
Nothing would encourage me	

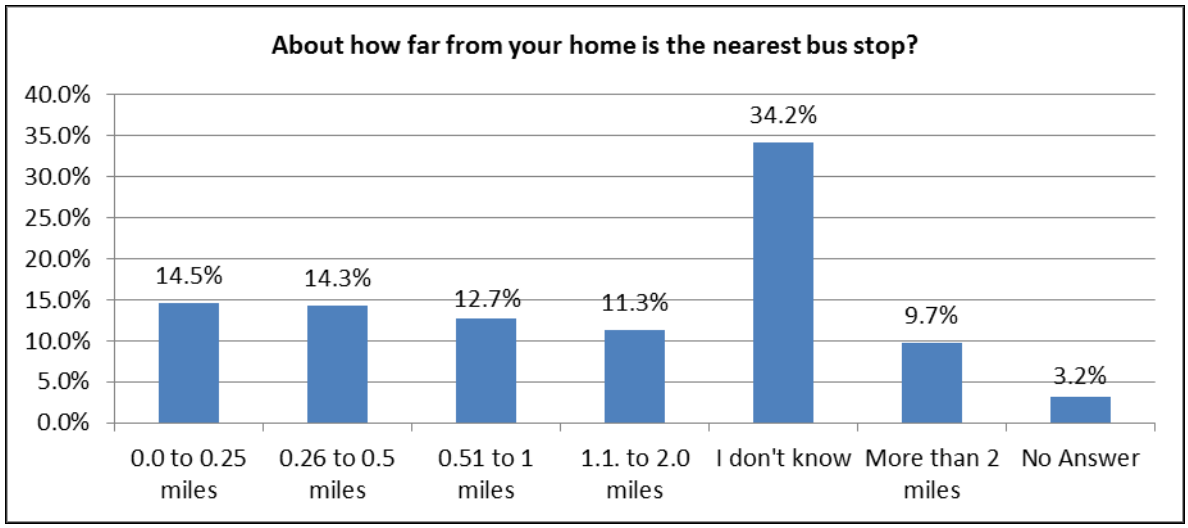
Table 4-9: What improvements could be made to encourage you to make more trips by train?

Improvement	Percent
More parking	37.6%
OTHER - Parking Management	0.7%
OTHER - Free or less expensive parking	0.9%
More shuttles/bus connections	19.6%
Better bicycle and pedestrian connections	20.6%
OTHER - Safety improvements	1.2%
Roadway improvements	8.1%
Carpool and auto-share	3.7%
Housing, employment and retail adjacent to the train station	7.2%
Information services regarding existing transit services	10.9%
OTHER - Faster, more reliable, expanded train service	14.3%
OTHER - Accessibility improvements	0.7%
OTHER - Lower train fares	9.7%
Other	0.5%
OTHER - Already ride the train	2.3%
Nothing would encourage me	11.8%
Total Respondents	**433**

"OTHER" was a response that was not in the original multiple choice list for the question but was an improvement that the respondent specified.

While shuttles to the train station ranked high on both lists of recommended improvements, when asked "About how far is your home from the nearest bus stop?" a large percentage of people (34 percent) responded that they did not know (see Figure 4-13). All other responses were fairly evenly dispersed among the mileage bracket ranges.

Figure 4-13: Distance from Home to Nearest Bus Stop



Nearly 38 percent responded that there are sidewalks on most/ all streets and almost 37 percent reported that there are sidewalks on some street in their home neighborhood (see Figure 4-14).

When asked "What improvements could be made to encourage you to make more trips by walking?" the top responses included provide more sidewalks (almost 30 percent), maintain sidewalks (27 percent), and better snow removal (15 percent) as shown in Figure 4-15. This suggests that people might walk more if given small improvements to the walking environment. Although, about a quarter (24 percent) indicated that nothing would encourage them to walk more.

When asked "What improvements could be made to encourage you to bicycle to the train station?" the top responses included bike lockers/ racks (almost 26 percent), shoulders on the roadway for bike use (nearly 21 percent), make motorists aware of bicyclists (almost 20 percent), separate bike lanes (nearly 19 percent) and more bike lanes (about 16 percent) as shown in Figure 4-16. This indicates the potential to encourage more people to bicycle to transit if given improved amenities. Almost 30 percent responded that nothing would encourage them to bicycle to the train.

Figure 4-14: Sidewalks in Home Neighborhood

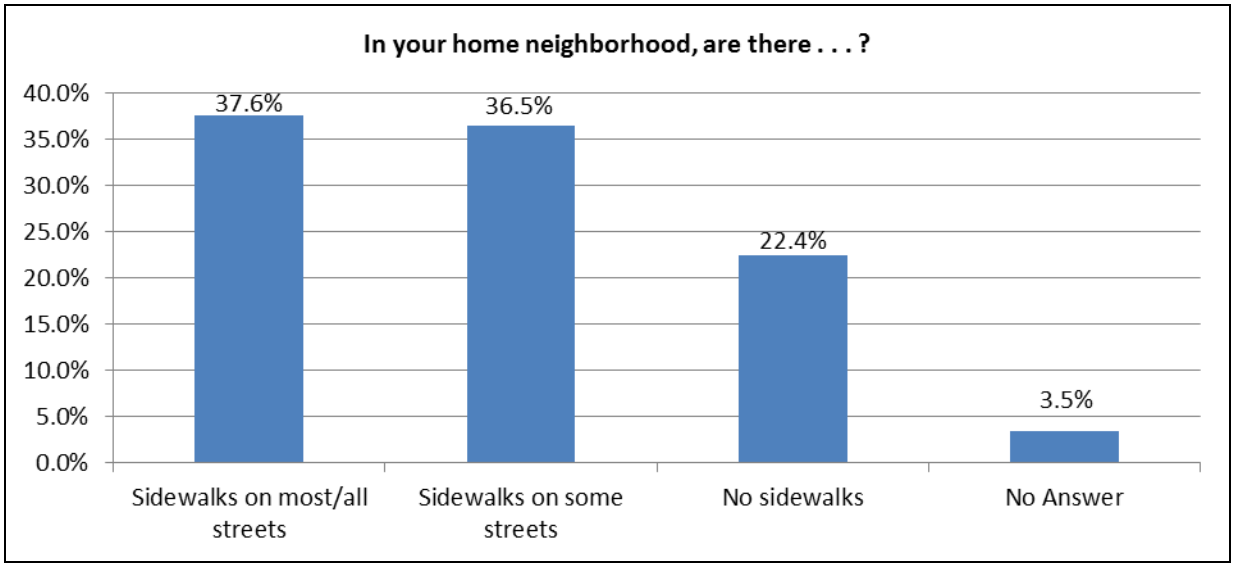


Figure 4-15: Walking Improvements

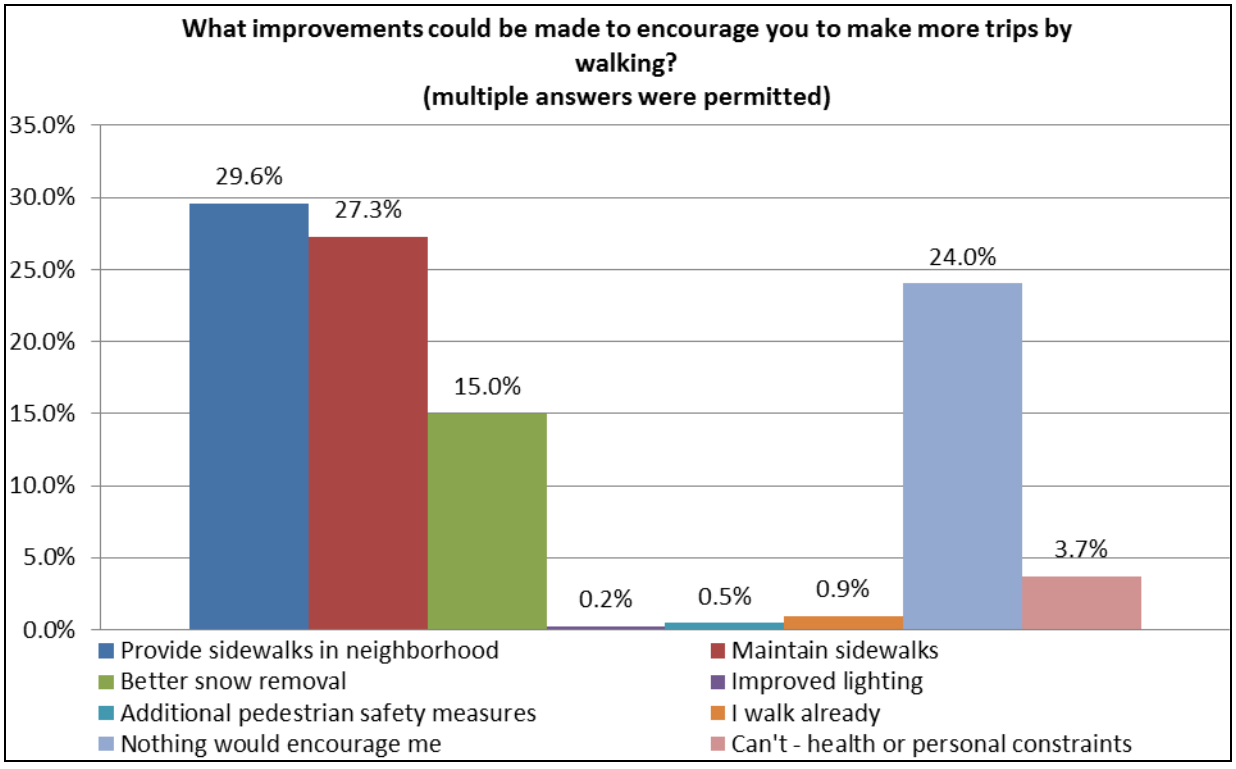
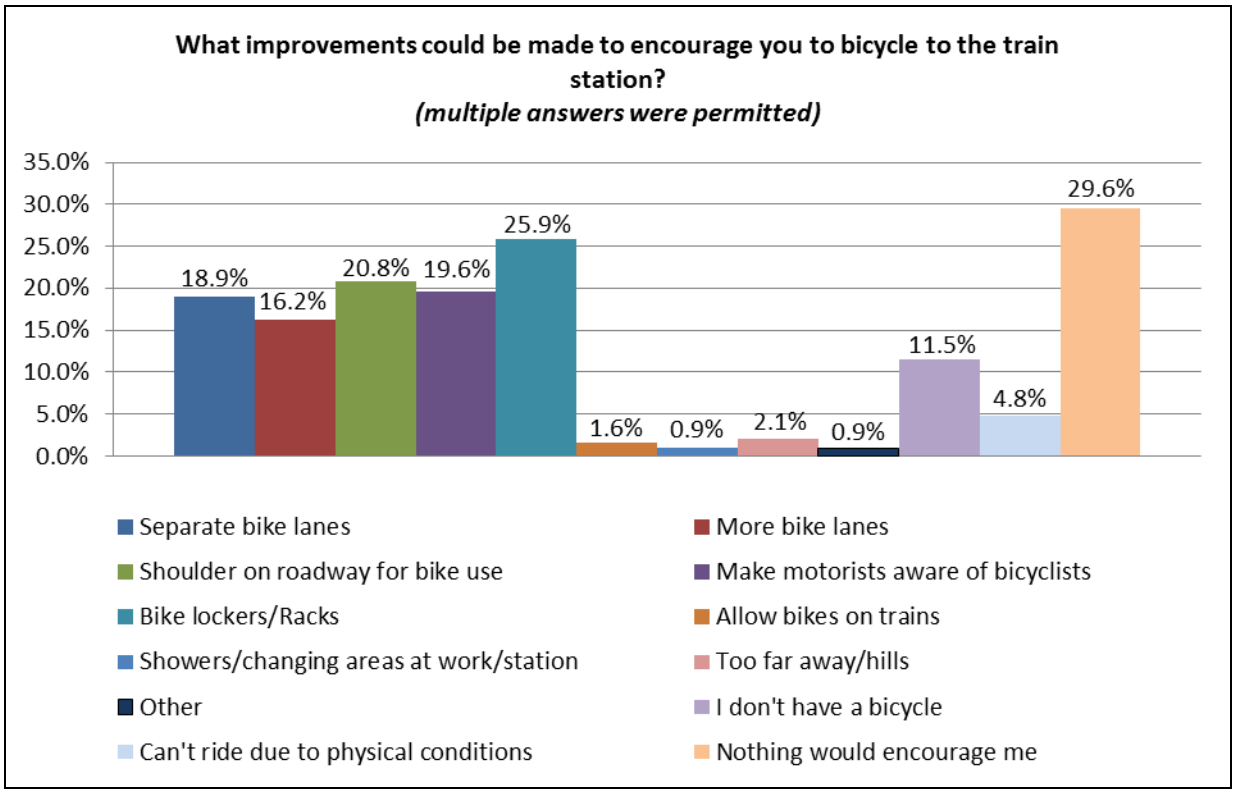


Figure 4-16: Bicycle Improvements



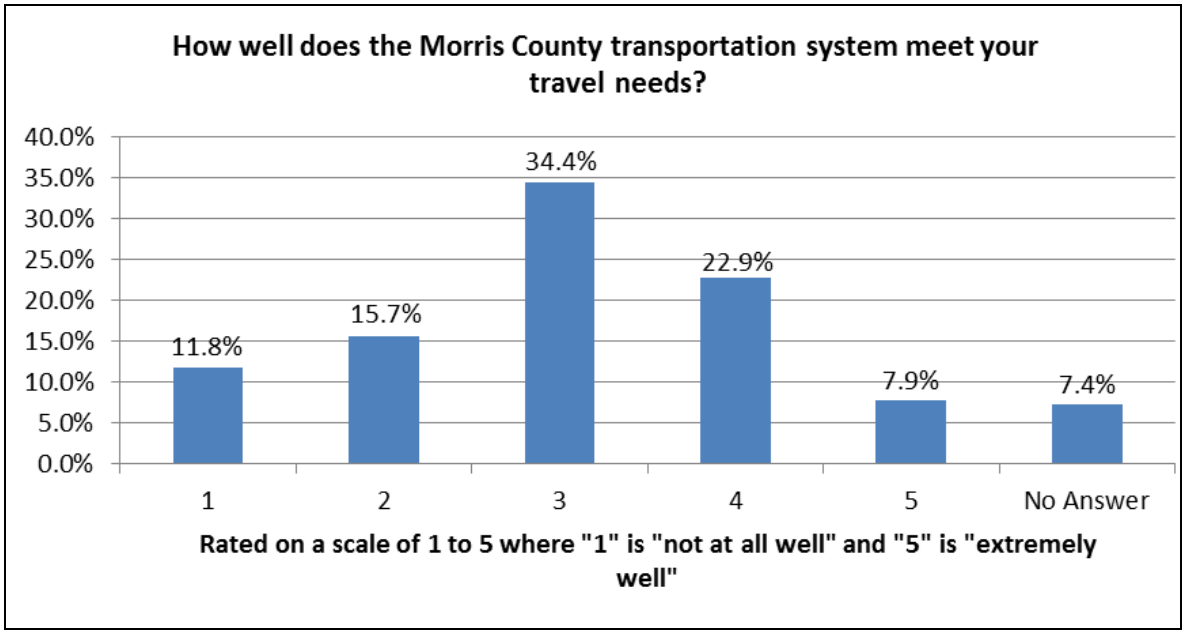
4.7.7 Customer Information and Satisfaction

Nearly 31 percent of the respondents have requested or sought information on the types of transportation available in Morris County or other parts of New Jersey within the past year. In general, these respondents sought bus or train schedules and fare information via online sources. Based on the information they acquired, almost 31 percent of those who sought information (or just under 10 percent of the total respondents) made a change in the way they travel. Nearly 69 percent of those requesting information, did not make a change in their travel option based on the information they found. In most cases the reason they did not make a change was because the service did not meet their needs in terms of service area, schedule, or cost.

Survey participants were asked to rate how well the Morris County transportation system meets their needs. The ratings were based on a scale of 1 to 5 where "1" is "not at all well" and "5" is "extremely well." Almost 31 percent rated the transportation system a 4 or 5, the highest ratings. About 34 percent rated it a 3, and almost 28 percent rated it a 1 or 2 (see Figure 4-17).

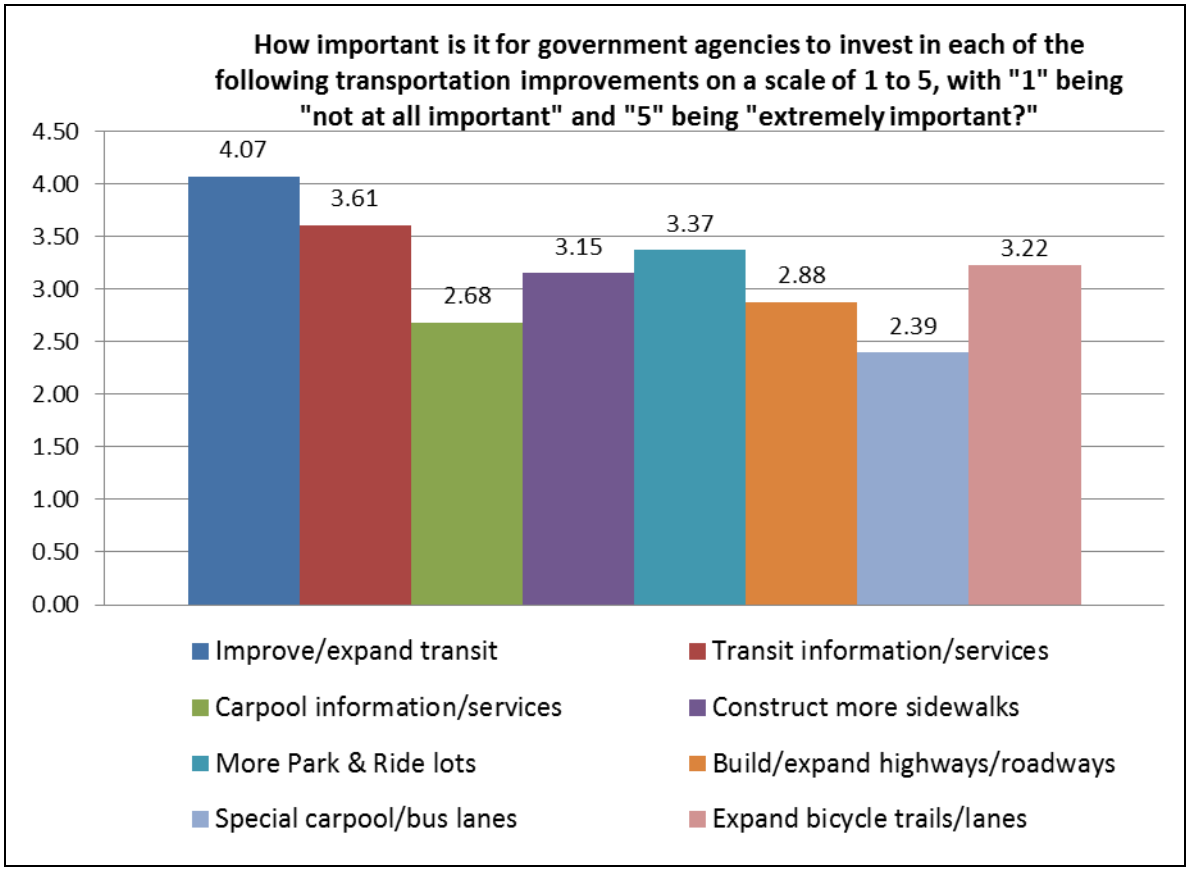
Overall, the weighted average rating was 2.99, which indicates that most people are satisfied with the Morris County transportation system.

Figure 4-17: Rating of Morris County Transportation System



The final question of the survey asked respondents to rate how important it is for government agencies to invest in various transportation improvements. A similar scale of 1 to 5 was used where "1" represents "not at all important" and "5" is "extremely important." Figure 4-18 shows the weighted average rating for each improvement. The highest average rating was given to improving and expanding transit (4.07) which was echoed in the responses to the questions regarding what was needed to encourage the respondents to use the train more. The second highest average response was to improve transit information and services (3.61). Adding more service was also mentioned often in the train use related questions. More park and ride lots rated third highest (3.37), followed by expanding bicycle trails/ lanes (3.22) and constructing more sidewalks (3.15). Building/ expanding highways and roads, providing carpool information and services, and special carpool or bus lanes were ranked the lowest.

Figure 4-18: Transportation Improvement Investment



Based on the survey respondents, improving access to the train stations would be best achieved by a multi-pronged approach with a broad range of improvements for all modes and users. The key improvements identified from the survey include:

- more parking,
- better bicycle and pedestrian connections,
- shuttle and bus connections,
- faster, more reliable, or expanded train service, and
- better information regarding existing transit services.

The key transportation improvements identified from the earlier multiple choice and open-ended questions regarding needed improvements are consistent with responses from this question regarding ratings for transportation improvement investments. Respondents from both groups of questions ranked improving/ expanding transit, providing transit information and services, and providing more park and ride lots as the top three choices.

4.8 ScoreCard Survey Findings

A total of 373 surveys were submitted by passengers either boarding or alighting trains at Chatham, Madison, or Convent Stations (see Table 4-10). Since the survey asked about the respondents' first trip of the day, most (319) responses were from passengers boarding trains at the study area stations while the remaining responses (55) were from passengers alighting trains.

The survey responses were weighted (or expanded) to represent the full "universe" (also known as the *potential respondent pool*) of passengers. NJ TRANSIT provided typical weekday passenger information from 2009 through 2011 for the three stations in the study area that represents this "universe." A total of 2,561 passengers were represented as boarding or alighting trains that stopped at study area stations during the AM Peak period (Table 4-11). This data was used to adjust the survey responses to account for non-responses (the difference between the survey responses and the universe of passengers). Weighting factors were developed for each station based upon this difference. For instance, we received 101 survey responses for Madison Station and the universe of passengers for Madison is 672. Therefore each of the survey responses can be expanded to represent the universe of passengers by multiplying each response by a weighting factor (Table 4-11) of 6.653 (672 divided by 101). Weighted data analyses adjust the raw survey data to accurately represent the population from which the sample is drawn. The weighted survey responses are presented in Table 4-12.

Table 4-10: Boarding and Alighting Stations (*Unweighted Survey Responses)*

	Boarding Station							
Alighting Station	**Chatham**	**Madison**	**Convent Station**	**Newark Broad Street**	**NY Penn Station**	**Other**	**No Answer**	**Totals**
Chatham				2		3	1	6
Madison					15	6		21
Convent Station	1			2	9	16		28
Hoboken	15	11	18					44
Newark Broad		5	4					9
Newark Penn		1						1
NY Penn Station	81	79	89					249
Other	1	3	2					6
No Answer	4	2	3					9
Total	**102**	**101**	**116**	**4**	**24**	**25**	**1**	**373**

Table 4-11: Passenger Volumes and Weighting Factors

AM Peak Passenger Volumes[20]

Station	ON	OFF	Total
Chatham	798	71	869
Madison	672	123	795
Convent Station	582	334	916
Total	2052	528	2580

Weighting Factors

Station	ON	OFF
Chatham	7.90099	11.83333
Madison	6.653465	5.857143
Convent Station	5.017241	11.92857

Table 4-12: Boarding and Alighting Stations (*Weighted Survey Responses)*

	Boarding Station							
Alighting Station	**Chatham**	**Madison**	**Convent Station**	**Newark Broad Street**	**NY Penn Station**	**Other**	**No Answer**	**Totals**
Chatham				24		36	12	**71**
Madison					88	35		**123**
Convent Station	10			23	104	184		**321**
Hoboken	117	73	90					**281**
Newark Broad Street		33	20					**53**
Newark Penn Station		7						**7**
NY Penn Station	634	526	447					**1606**
Other	10	20	10					**40**
No Answer	31	13	15					**60**
Total	**802**	**672**	**582**	**47**	**192**	**255**	**12**	**2,561**

[20] AM Peak Passenger volumes were provided by NJ TRANSIT and represent typical AM Peak volumes at these stations. The passenger count data were collected on various dates in 2009 and 2011.

The next sections were prepared from the weighted survey results. The responses were weighted by boarding station and whether they were boarding or alighting trains at Chatham, Madison, or Convent Station.

4.8.1 Rail Passenger Origins

A large percentage of passengers boarding trains at the three study area stations had origins or resided in the same municipality that the station is located as shown in Figures 4-19 through 4-21. About 41 percent of the passengers boarding trains in Chatham had a Chatham Borough origin, about 63 percent of the Madison passengers had a Madison origin, and nearly 39 percent of the passengers boarding trains at Convent Station indicated their origin was Morris Township.

Figure 4-19: Origins of Passengers Boarding Trains at Chatham Station

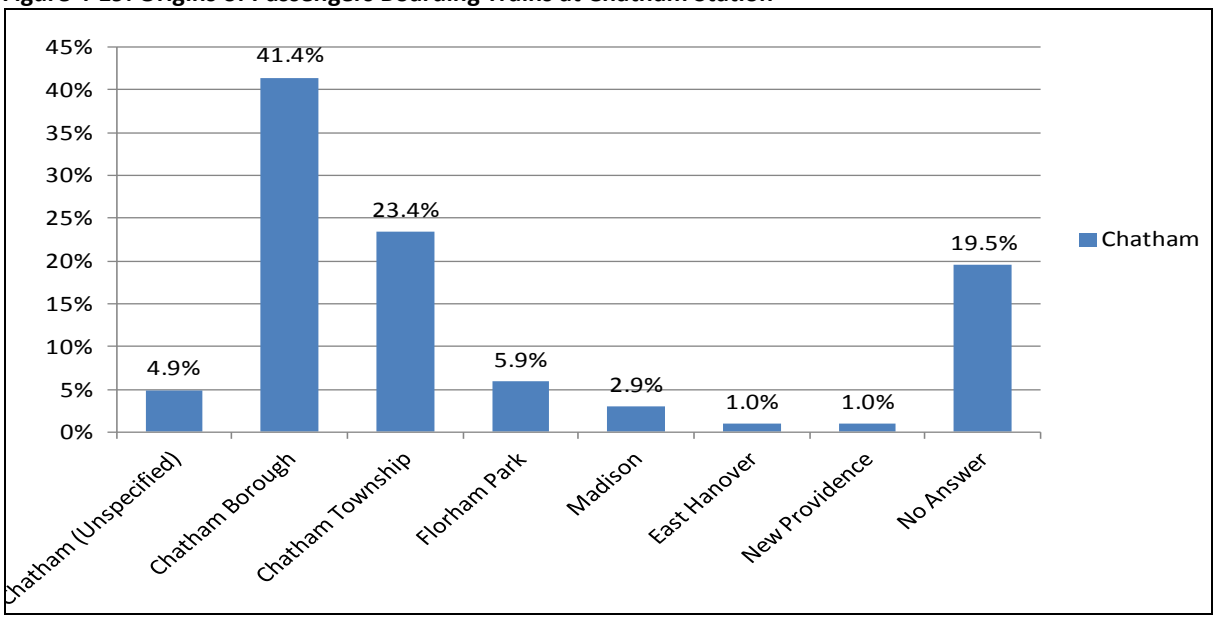


Figure 4-20: Origins of Passengers Boarding Trains at Madison Station

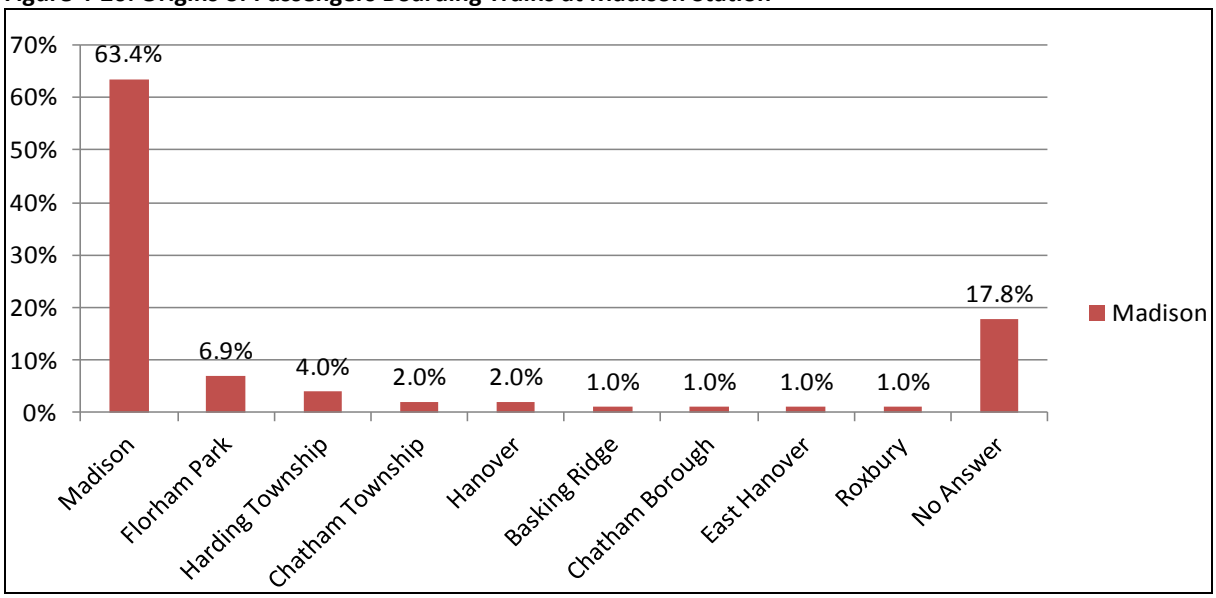
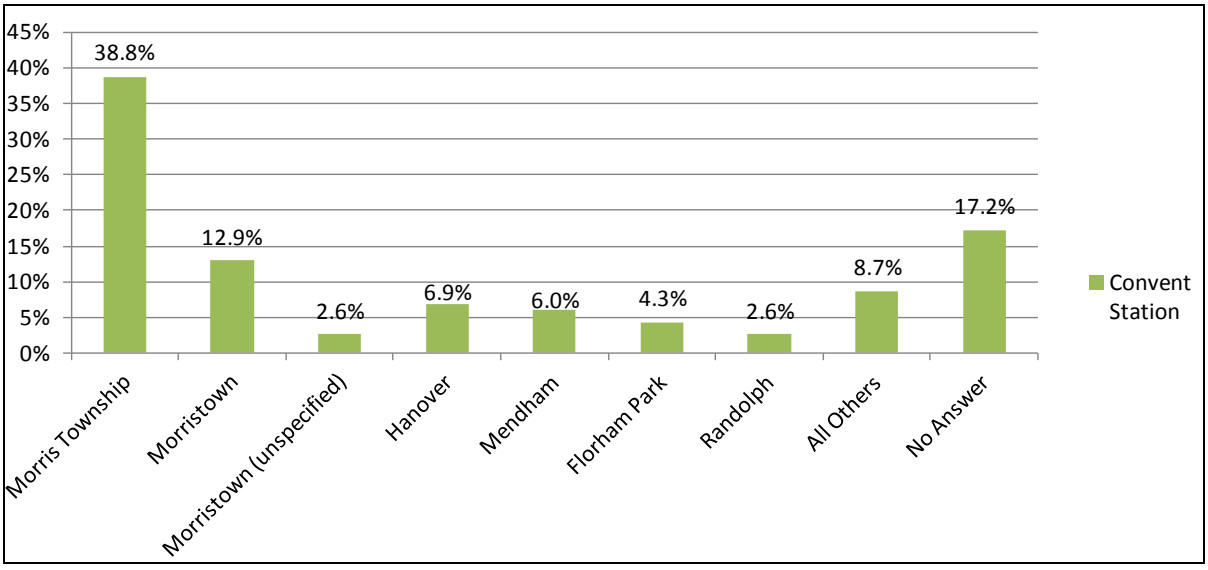


Figure 4-21: Origins of Passengers Boarding Trains at Convent Station



4.8.2 Accessing the Stations

As shown in Figures 4-22 through 4-24, most passengers accessed the study area stations by car, and most drove alone and parked (Chatham 37 percent, Madison almost 49 percent, and Convent Station 74 percent). About 22 percent at Chatham, nearly 19 percent at Madison, and almost eight percent of the surveyed passengers at Convent Station were dropped off at the station by car. Smaller percentages of responding passengers arrived via carpools.

At Chatham (nearly 27 percent) and Madison (almost 26 percent) Stations, many of the survey respondents walked to the stations, while at Convent Station only about nine percent of the respondents walked to the station, reflecting the more suburban development pattern in its vicinity. Access by bus or shuttle, and bicycle comprised about three percent for each mode at the stations.

The egress mode for passengers alighting trains at the three study area stations was generally either walking or bus/ shuttle as shown in Figure 4-25.

Figure 4-22: Access Mode by Boarding Station – Chatham

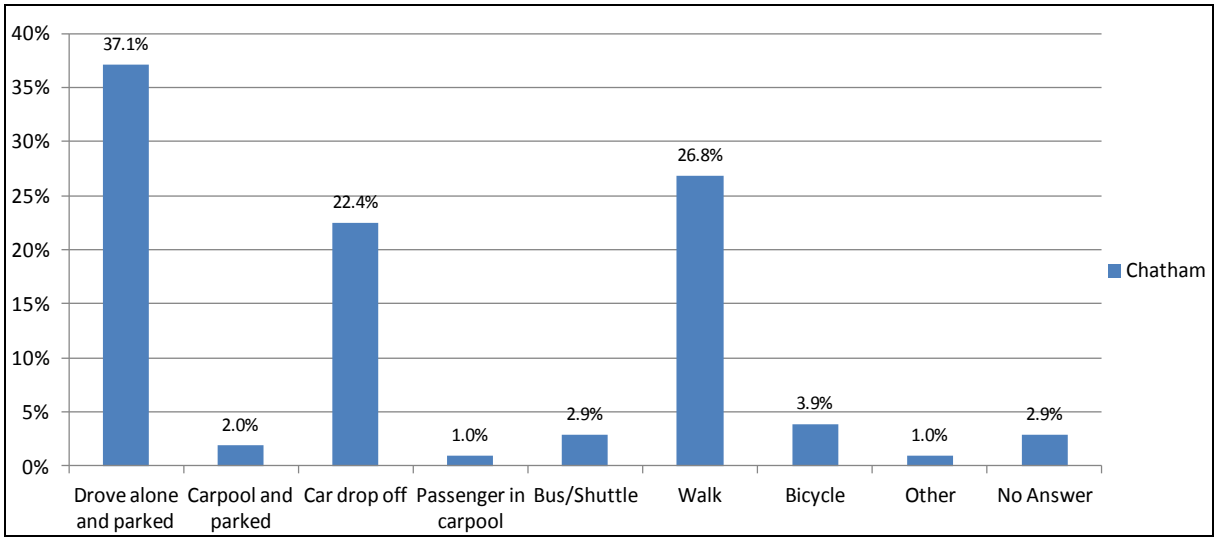


Figure 4-23: Access Mode by Boarding Station – Madison

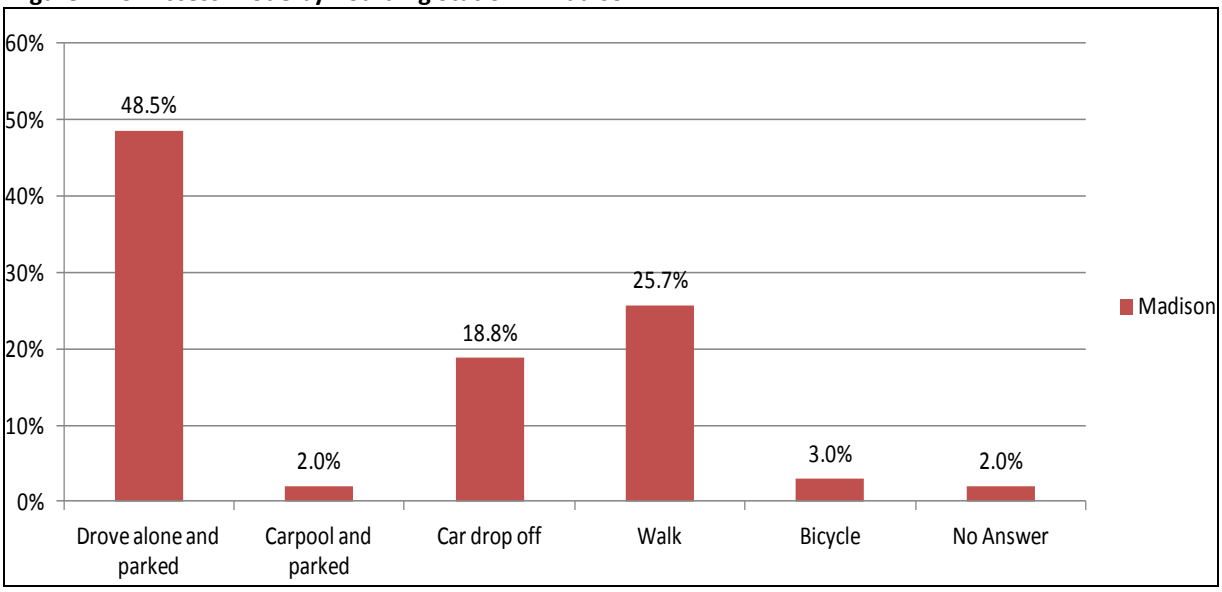


Figure 4-24: Access Mode by Boarding Station – Convent

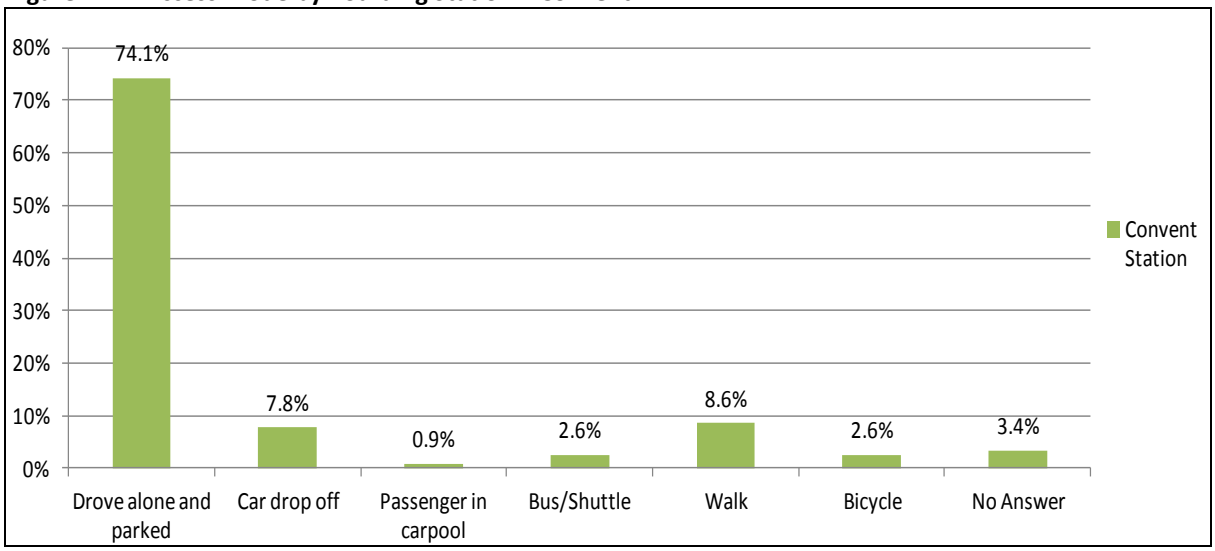
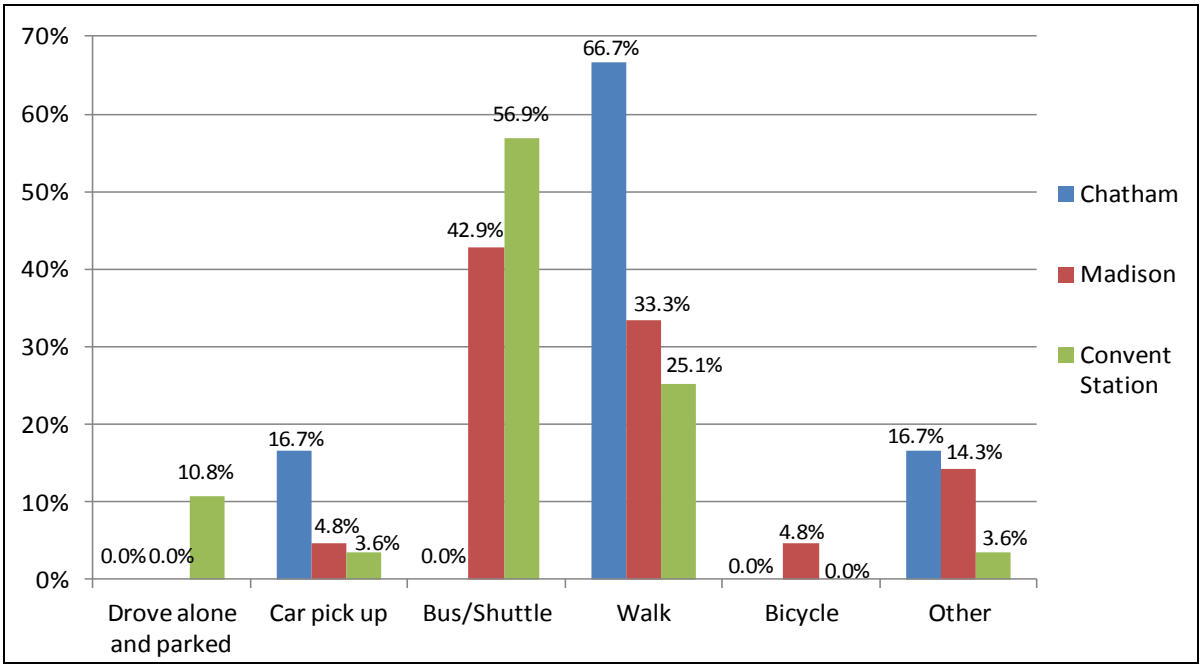


Figure 4-25: Egress Mode for Alighting Passengers



4.8.3 Parking at the Stations

For respondents boarding at Chatham Station, about 46 percent parked in a station or municipal lot resident-designated parking space, and almost 44 percent parked in a non-resident space (see Figure 4-26). At Madison Station, nearly 59 percent parked in a resident-designated parking space, and almost 18 percent of passengers utilized non-resident station or municipal lot parking, or free on-street parking. Resident and non-resident municipal parking was used by about 49 and 46 percent of the passengers, respectively, at Convent Station.

At Chatham Station, almost 49 percent of the responding passengers paid a daily parking fee, and nearly 20 percent paid for parking via a monthly permit (see Figure 4-27). At Madison Station, almost 26 percent of the passengers have a monthly parking permit, nearly 24 percent are daily meter parkers, and almost 16 percent park for free. At Convent Station, 32 percent of the passengers are daily meter parkers and 31 percent have monthly permits.

Figure 4-26: Parking Location

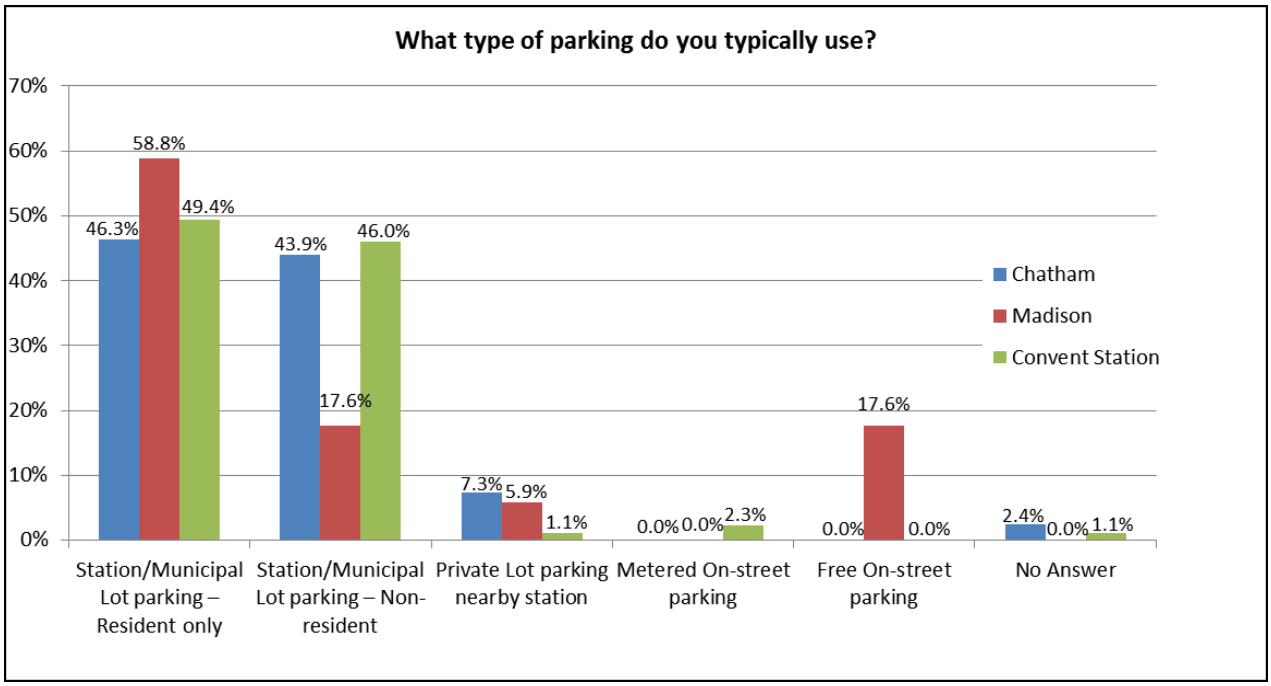
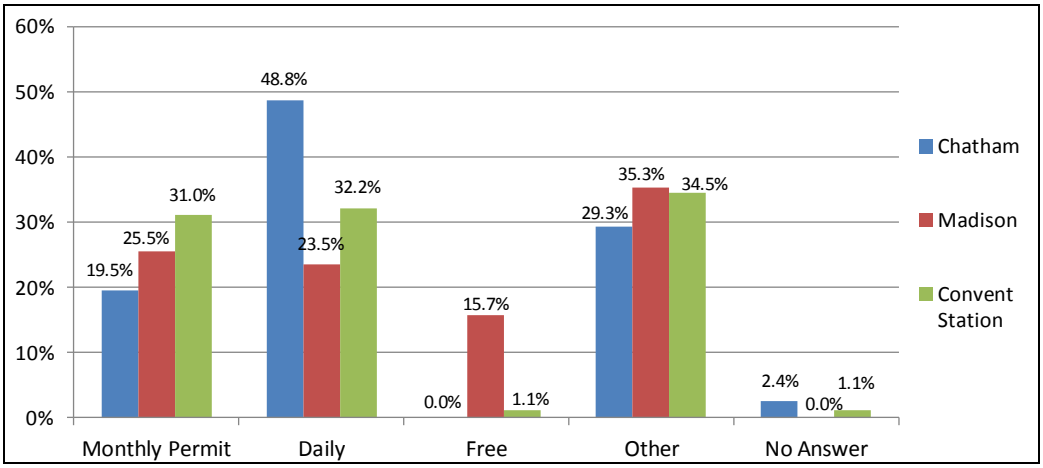


Figure 4-27: Parking Payment Type



4.8.4 Vehicle Availability

A high majority of the passengers boarding trains at the three study area stations had personal vehicles available for the trip (78 to almost 85 percent) as shown in Figure 4-28. Passengers alighting trains at the three study area stations were more transit-dependent (see Figure 4-29). About 67 percent of alighting passengers at Chatham Station and about 61 percent at Convent Station had access to a personal vehicle for the trip, while only 33 percent at Madison Station had access to a personal vehicle.

Figure 4-28: Was a personal vehicle available to you to make this trip? (by boarding station)

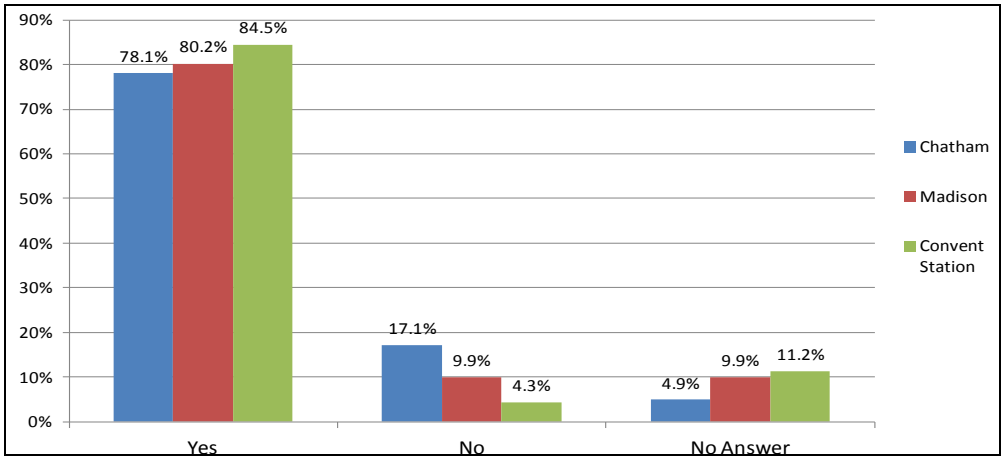
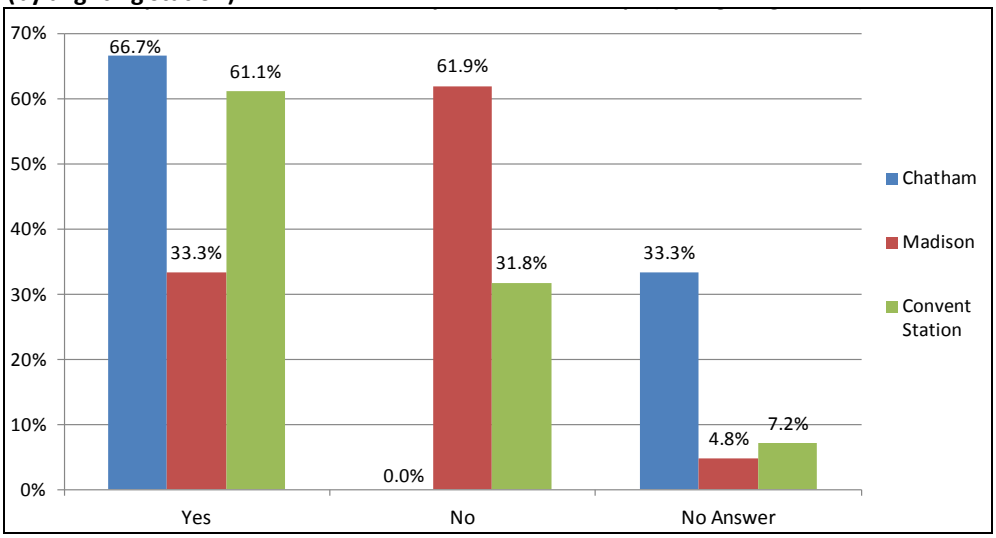


Figure 4-29: Was a personal vehicle available to you to make this trip? (by alighting station)



If transit service was not available for the trip, most passengers said they would drive alone as an alternative (almost 50 to nearly 60 percent) as shown in Table 4-13. Some passengers said they would carpool (nearly nine to almost 14 percent), and others said they would not make the trip (about 10 to nearly 21 percent).

Table 4-13: If transit service was not available, how would you have made this trip?

Alternate Mode	Chatham	Madison	Convent Station
Drive alone	56.6%	49.5%	59.5%
Car drop off	2.9%	2.0%	0.9%
Carpool	14.6%	13.9%	8.6%
Taxi	0.0%	1.0%	0.9%
Walk	2.4%	0.0%	0.0%
Would not have made this trip	9.8%	20.8%	12.1%
Other	8.8%	3.0%	6.9%
No Answer	4.9%	9.9%	11.2%
Total	**100.0%**	**100.0%**	**100.0%**

4.8.5 Trip Frequency and Purpose

As shown in Tables 4-14 and 4-15, most (70 to almost 83 percent) of the survey respondents are regular passengers who ride the train four or more times a week, and most (85 to almost 91 percent) of these riders are commuters.

Table 4-14: Trip Frequency by Station

Trip Frequency	Chatham	Madison	Convent Station
4 or more times a week	81.4%	71.3%	82.5%
1 - 3 times a week	9.5%	18.8%	12.9%
1 - 3 times a month	1.8%	3.2%	1.8%
6 - 11 times a year	0.0%	2.4%	0.0%
1 - 5 times a year	3.6%	0.8%	0.6%
No Answer	3.6%	3.3%	2.2%
Total	**100.0%**	**100.0%**	**100.0%**

Table 4-15: Trip Purpose by Station

Trip Purpose	Chatham	Madison	Convent Station
Work	90.0%	85.2%	90.8%
Company business	1.8%	0.8%	1.8%
School	0.0%	2.4%	1.8%
Recreation	3.6%	2.5%	0.6%
Medical	0.9%	0.0%	0.0%
Social	0.0%	2.5%	0.6%
Personal business	0.0%	3.1%	1.1%
Other	0.0%	0.0%	1.1%
No Answer	3.6%	3.3%	2.2%
Total	**100.0%**	**100.0%**	**100.0%**

4.8.6 Station Access Preferences

Train passengers were asked "What one improvement would you make to improve your travel to the station?" Their responses were coded for analysis (the detailed survey and responses can be found in Appendix B). About 48 percent of the Chatham Station passengers, 34 percent of the Madison Station passengers, and 25 percent of the Convent Station passengers that responded to the question commented on parking, including asking for more parking, better parking management, or free or less expensive parking (see Table 4-16). About eight to 10 percent of those that responded from each station would like to see bicycle, pedestrian, or safety improvements. A very high percentage of respondents at each station (Chatham Station – 25 percent, Madison Station – 43 percent, Convent Station almost 49 percent) said that nothing was needed to improve travel to the station.

Table 4-16: What one improvement would you make to improve your travel to the station?

Comments	Chatham	Madison	Convent Station
More parking	31.3%	21.5%	6.8%
Parking Management	10.8%	6.3%	12.5%
Free or less expensive parking	6.0%	6.3%	5.7%
Parking	**48.2%**	**34.2%**	**25.0%**
Shuttles	**3.6%**	**1.3%**	**8.0%**
Improved bicycle access, parking	1.2%	1.3%	2.3%
Improved walk access; sidewalks, crosswalks	8.4%	6.3%	4.5%
Safety improvements	0.0%	0.0%	1.1%
Bicycle/Pedestrian/Safety Improvements	**9.6%**	**7.6%**	**8.0%**
Traffic/Roadway Improvements	**0.0%**	**0.0%**	**2.3%**
TOD Development	**1.2%**	**0.0%**	**0.0%**
Information services regarding existing transit services	0.0%	1.3%	1.1%
Faster, more reliable, expanded train service	3.6%	5.1%	2.3%
Accessibility improvements	8.4%	2.5%	2.3%
Lower train fares	0.0%	1.3%	0.0%
Train Service/Fares/Info/Accessibility	**12.0%**	**10.1%**	**5.7%**
Other	**0.0%**	**2.5%**	**2.3%**
Nothing	**25.3%**	**44.3%**	**48.9%**
Total	**100.0%**	**100.0%**	**100.0%**

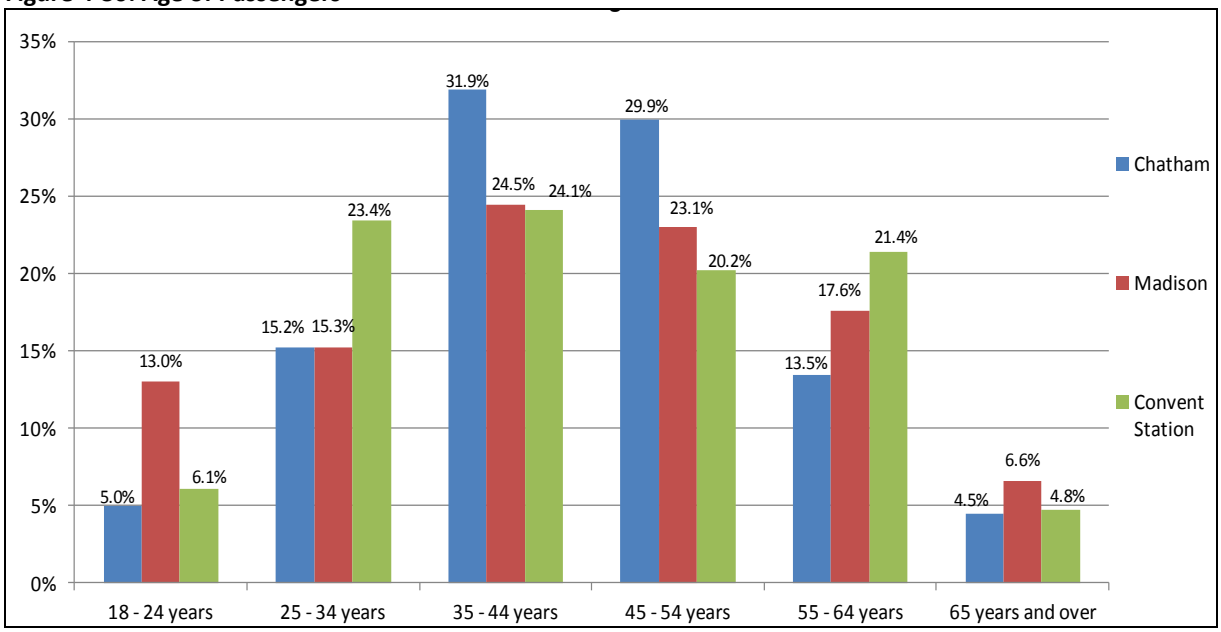
4.8.7 Demographics of Respondents

This section provides detail on the demographic characteristics of responding passengers that either boarded or alighted trains at Chatham, Madison, or Convent Stations including gender, age, Spanish/ Hispanic/ Latino origin, ethnicity, and income. All percentages are based on total respondents (both boarding and alighting passenger) that answered the survey question.

At all three stations a majority of the respondents were male – almost 68 percent at Chatham Station, 62 percent at Madison Station, and nearly 54 percent at Convent Station.

Almost 62 percent of the Chatham Station passengers, nearly 48 percent of the Madison Station passengers, and 44 percent of the Convent Station passengers that responded indicated they were between 35 to 54 years old, as shown in Figure 4-30.

Figure 4-30: Age of Passengers



A majority of the transit rider survey respondents were white in ethnicity (nearly 82 percent of the Chatham passengers, 89 percent of the Madison passengers, and 82 percent of the Convent Station).

As shown in Figures 4-31 through 4-33, passengers that use the three study area train stations tend to be in the higher household income brackets with 39 percent of Chatham Station passengers, 27 percent of Madison Station passengers, and almost 19 percent of Convent Station passengers indicated they earn $250,000 or more.

Figure 4-31: Chatham Station Riders Household Income

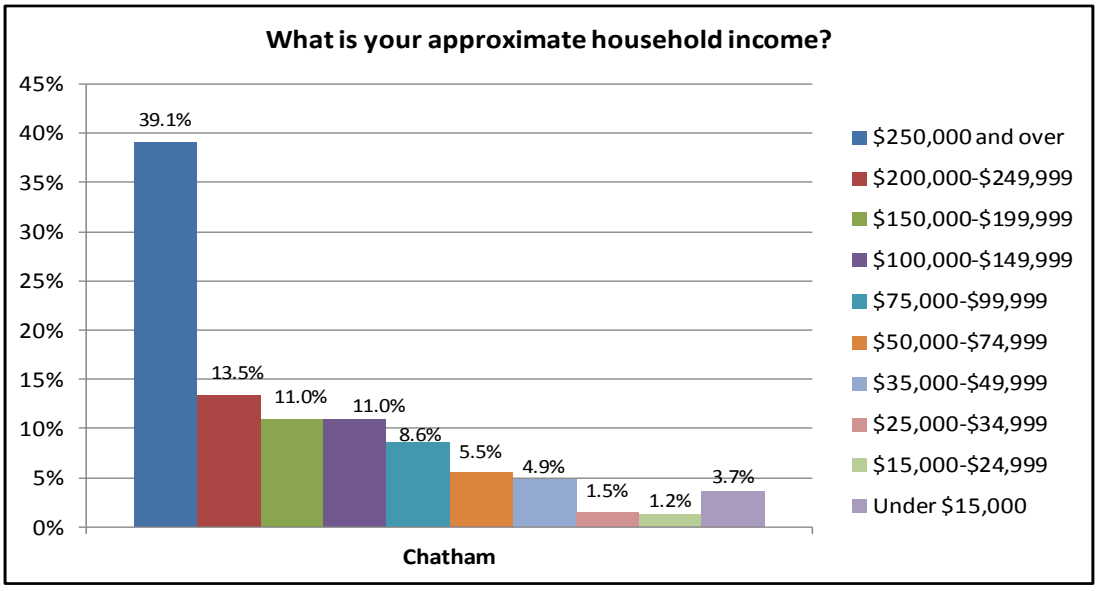


Figure 4-32: Madison Station Riders Household Income

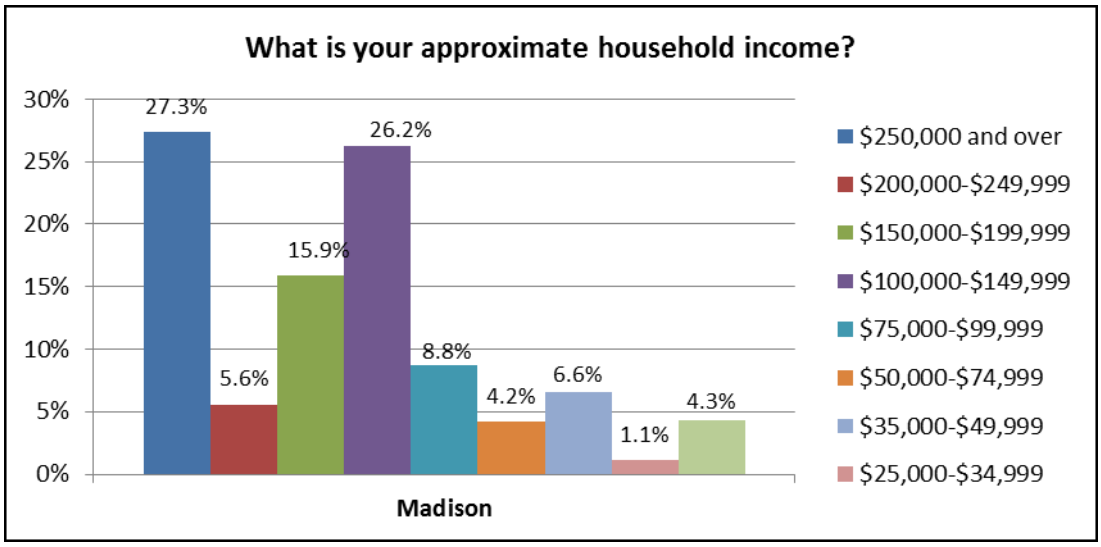
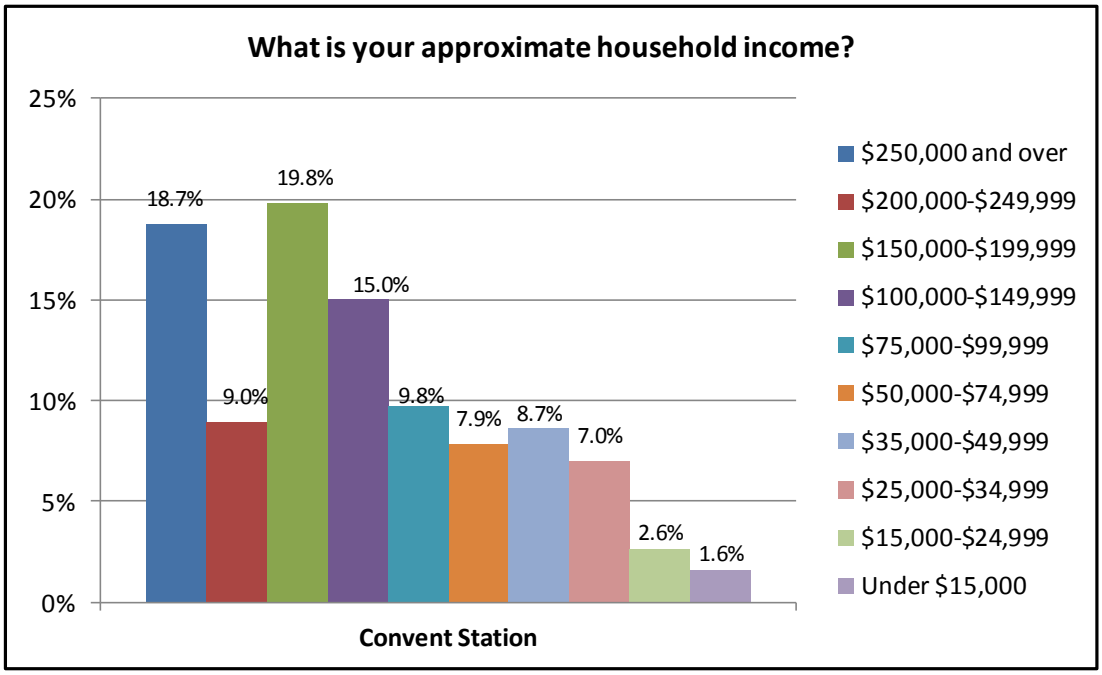


Figure 4-33: Convent Station Riders Household Income



4.9 Municipal Presentations

Presentations summarizing the project findings and recommendations were made at public forums in the study area as follows:

- May 13, 2013: Chatham Borough Council
- May 15, 2013: Morris Township Committee
- May 21, 2013: Madison Borough Planning Board

The Chatham Borough Council noted that some of the study recommendations were already being implemented and that no single municipality could bear the cost of the full range of the improvements. In addition the Council noted that they were committed to maintaining the character of their borough. The Morris Township Committee and the Madison Borough Planning Board were interested in the parking and land use recommendations.